

CLAIMS

1. A nerve or muscle stimulation apparatus comprising:
a nerve stimulation array electrode comprising a
5 substrate for application to the skin of a user bearing
an array of electrodes arranged to be brought into
electrical contact with the skin of a user when the
substrate is positioned on said skin,
10 one or more input contacts, the or each said input
contact being switchably electrically connected to a
group of electrodes consisting of some or all of said
electrodes, and
15 user operable switch means for performing said
electrical connection by making and breaking electrical
connection between the or each said input contact and
any selected one or ones of its respective group of said
electrodes.
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2. Apparatus as claimed in Claim 1, wherein said substrate
bears an array of electrodes arranged in rows and
columns.
- 25 3. Apparatus as claimed in Claim 1, wherein there are at
least 12 electrodes in the array.
4. Apparatus as claimed in Claim 1, wherein there are at
least 24 electrodes in the array.
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5. Apparatus as claimed in Claim 1, wherein the electrodes
are evenly spread over the substrate.

6. Apparatus as claimed in Claim 1, wherein the maximum space between adjacent electrodes is no more than 5 mm.
7. Apparatus as claimed in Claim 1, wherein the maximum space between adjacent electrodes is no more than 2 mm.
8. Apparatus as claimed in Claim 1, wherein the switch means is carried by the substrate.
9. Apparatus as claimed in Claim 1, wherein the switch means comprises a respective manually operable switch associated with each electrode.
10. Apparatus as claimed in Claim 1, wherein the switch means comprises:
 - an electronic user interface unit adapted to receive a user input representing an electrode selection and to communicate data signals representing said selection to an electronic switching unit; and
 - a said electronic switching unit adapted to receive said data signals and to perform connection of selected electrodes to said input contact(s).
11. Apparatus as claimed in Claim 10, wherein said electronic user interface unit is adapted to accept programming to alter said selection of electrodes to accommodate said selection to alterations in the desired site of stimulation with time or user muscle movement.
12. Apparatus as claimed in Claim 10, wherein said electronic switching unit is mounted to said substrate and wherein said electronic user interface unit is

remote from said substrate and is wirelessly connected or in wired connection with said electronic switching unit.

- 5 13. Apparatus as claimed in Claim 1, comprising in addition to said array electrode, one or more further electrodes connected to said switch means.
- 10 14. Apparatus as claimed in Claim 1, wherein the user operable switch means is operable to make connection between the or a said input contact and a first electrode set constituted by a selected one or selected ones of its respective group of electrodes and with a second electrode set constituted by a selected one or selected ones of its respective group of electrodes, leaving disconnected at least one further electrode positioned between said first and second electrode sets.
- 15 15. Apparatus as claimed in Claim 1, further comprising a source of nerve or muscle stimulation signals connected to the or a said input contact.
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